

perceived in the phænomenon of astronomical refraction, by which the sun or moon is rendered visible when actually sunk below the level of the true horizon.

(28.) From what is above stated, it is easy to see that when a ray is transmitted through a sheet or plate of any substance (as a window-glass) with parallel surfaces, its course after emergence will be parallel to its original direction, so that though displaced laterally, its direction in space is unchanged, which is the reason we see objects in their proper directions through a window. If the surface at which it emerges be not parallel to that through which it enters, this exact restoration of the original direction will not take place; and as we judge of the situation of an object only by the direction in which its light ultimately enters the eye, anything seen through a transparent substance whose surfaces are so inclined, will appear shifted in angular position. Any transparent substance so formed of polished plane surfaces inclined to each other, is called in optics "*a prism;*" and the angle at which the two planes in question meet, or would meet if extended, its "refractive angle." If such a prism—of glass, for instance—be held before the eye with its refractive angle vertical, and to the left, an object seen through it will appear deviated or shifted to the left of its true situation, the ray (as a slight consideration will show) being bent *towards the* thicker part of the prism. And thus by a very simple calculation, with which we shall not trouble our readers, from the angular amount of deviation caused by a prism of any medium whose refracting angle is measured, can